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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,577	10/05/2001	Hubertus Cornelis Miermans	NL 000695	4661

24737 7590 11/13/2003

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EXAMINER

RODRIGUEZ, ISABEL

ART UNIT PAPER NUMBER

2836

DATE MAILED: 11/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/972,577

Applicant(s)

MIERMANS, HUBERTUS
CORNELIS

Examiner

Isabel Rodriguez

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/05/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10052001. 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Sekiguchi (US 6,398,505).

a) Regarding claims 1 and 5, Sekiguchi discloses a cooling system comprising a plurality of fans (3) and a protection circuit for an apparatus comprising the plurality of fans (3), the protection circuit comprises: a protection circuit for an apparatus (figs 2 and 13) comprising a plurality of fans (3), the protection circuit comprises a plurality of elements (SWa), each element being associated with a corresponding one of the plurality of fans (Tn) and having a property with a value depending on an operation condition of the corresponding one of said fans , the elements being arranged in parallel between a reference line (GND) and a protection line (NS),

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and a detection circuit (20,30) coupled to the protection line (NS) for detecting whether a total value of the parallel-arranged elements (SWa) is in a range indicating that at least one of the fans (3) is in an abnormal operation condition.

b) Regarding claim 2, Sekiguchi discloses a protection circuit as claimed in claim 1, characterized in that the element (SWa) comprises a current source (diode) for supplying a current whose the value depends on the operation condition of the corresponding fan (3).

c) Regarding claim 3, Sekiguchi discloses a protection circuit as claimed in claim 1, characterized in that the element (SWa) comprises an impedance element (transistor) of whose the value depends on the operation condition of the corresponding fan (3).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi.

Sekiguchi discloses a protection circuit as claimed in claim 3, characterized in that the impedance element comprises a main current path of an electronic switch, a control input of the electronic switch being coupled to the corresponding fan for receiving a signal indicating whether the fan is operative or inoperative. Sekiguchi further discloses a resistor connected in series with the parallel combination of switches. Sekiguchi does not disclose a series arrangement of a resistor and an electronic switch. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to replace the single resistor with a resistor in series with each switch because it is an art recognized equivalent and it is just duplication of parts. It has been held that mere duplication of parts has no patentable difference unless a new and unexpected result is produced. In re Harza 274 F. 2d 669, 124 USPQ 378 (CCPA 1960).

5. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi in view of Heady et al. (US 5,991,153).

a) Regarding claim 6, Sekiguchi discloses a cooling system comprising a plurality of fans (3) and a protection circuit for an apparatus comprising the plurality of fans (3), the protection circuit comprises: a protection circuit for an apparatus (figs 2 and 13) comprising a plurality of fans (3), the protection circuit comprises a plurality of elements (SWa), each element being associated with a corresponding one of the plurality of fans (Tn) and having a property with a value depending on an operation condition of the corresponding one of said fans, the elements being arranged in parallel between a reference line (GND) and a protection line (NS), and a detection circuit (20,30) coupled to the protection line (NS) for detecting whether a total value of the parallel-arranged elements (SWa) is in a range indicating that at least one of the fans (3) is in an abnormal operation condition. Sekiguchi does not specify that the cooling system is to be included in a display apparatus. Heady et al. discloses an electronic display unit that includes a cooling system with a plurality of fans (see abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the cooling system of Heady et al. with the cooling system of Sekiguchi because it is more reliable and efficient (see col.2 lines 23-26).

b) Regarding claim 7, it is inherent that the system disclosed by Sekiguchi comprises means for selectively limiting the power dissipation in the display apparatus in dependence on a number of fans operating abnormally.


Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isabel Rodriguez whose telephone number is 703-305-4761. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

IR
November 2, 2003


BRIAN SIRCUS
SENIOR PATENT EXAMINER
NOV 2 2003